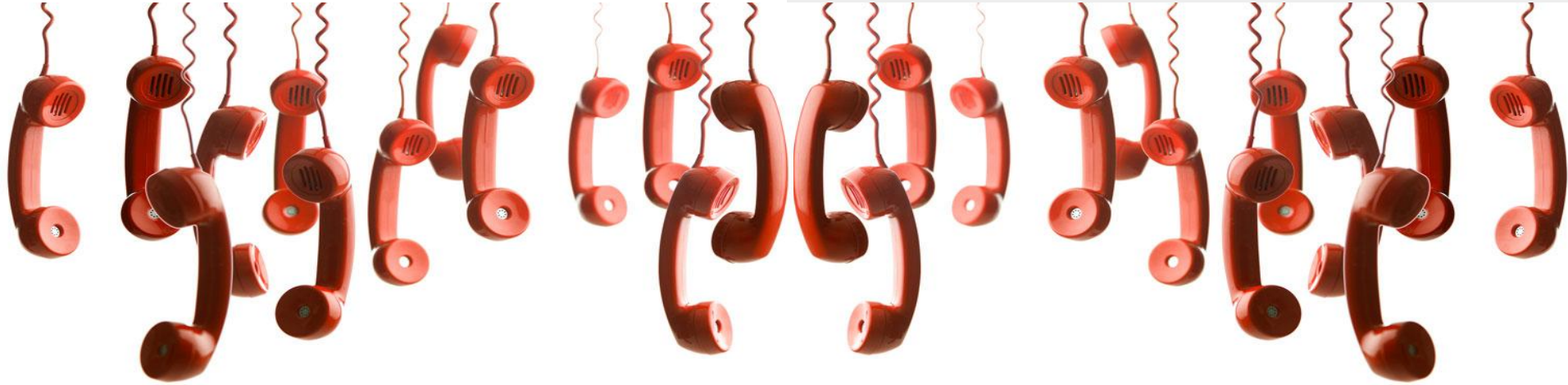


Operator Efficiency Research



CallMeMaybe

The virtual telephony service

Jan, 2021, Israel
by Aliona Slonkina

Project objective:



This research was conducted for the virtual telephony service 'CallMeMaybe'. They are developing a new function that will give supervisors information on the least effective operators.

The main goal of the project is to define ineffective operators.

This project uses data collected by the virtual telephony service.

Understanding the problem!

an operator is considered ineffective if they have:

Missed Incoming calls

A large number of missed incoming calls (internal and external)

**MISSED
CALL**



Waiting Time

A long waiting time for incoming calls

**INCOMING
CALL**



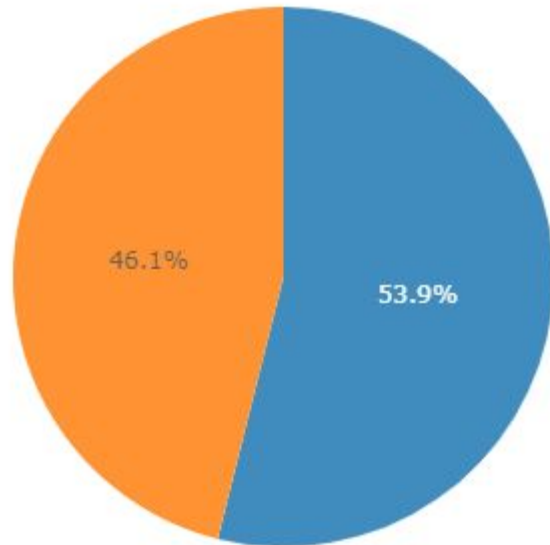
Outgoing calls

A small number of them is also a sign of ineffectiveness.

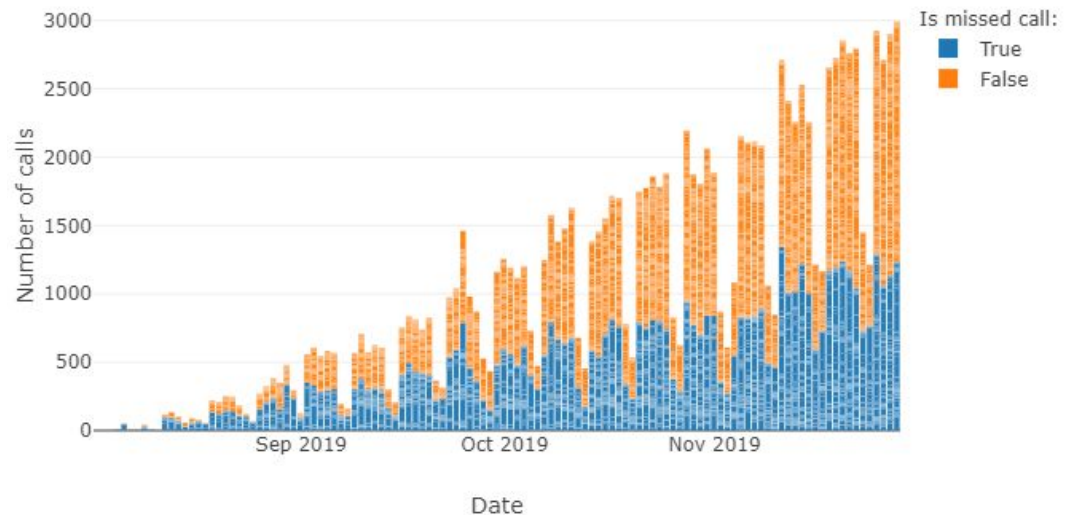
**OUTGOING
CALL**



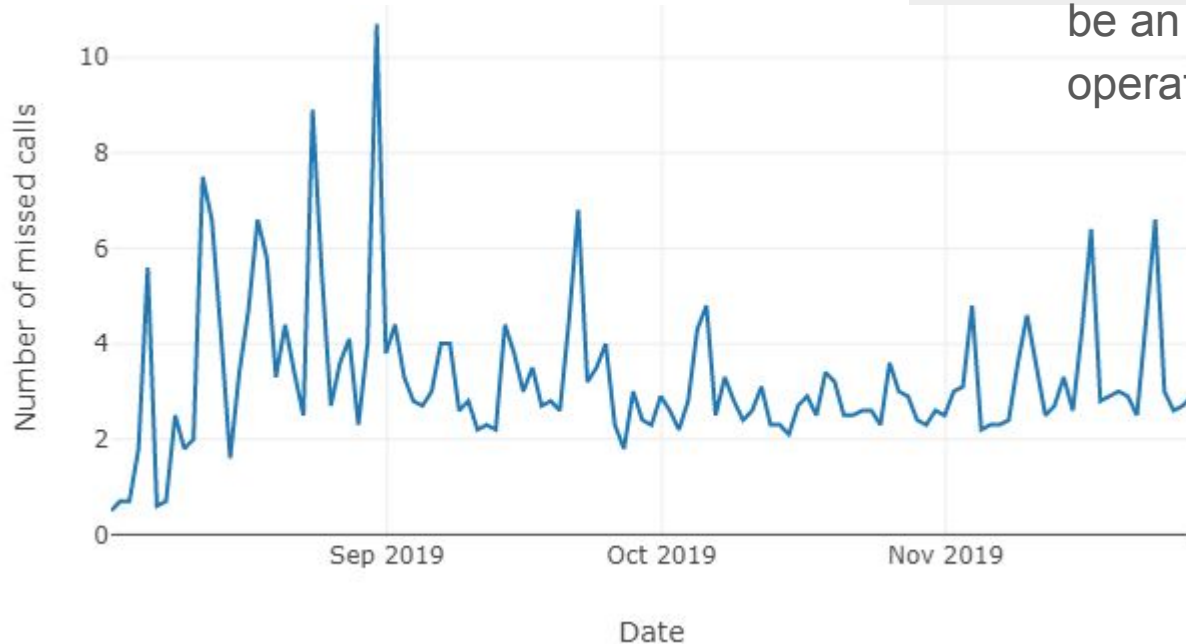
The ratio of missed incoming and answered calls.



- The total number of incoming calls grew during this period. But it looks like the share of missed calls has remained the same.



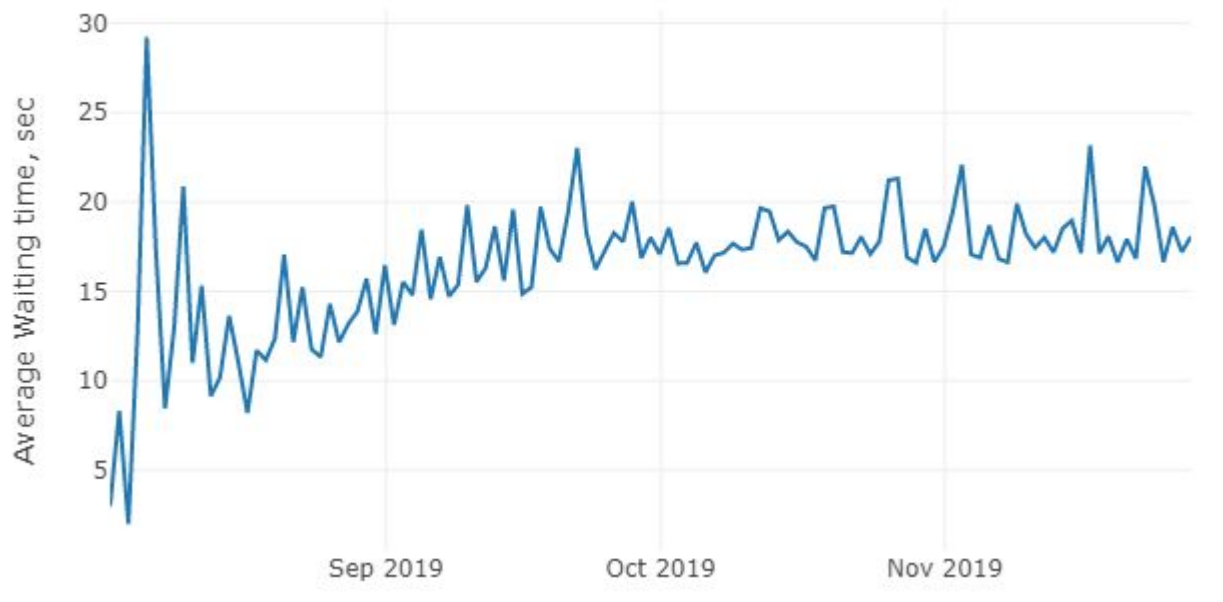
The average daily missed incoming calls per operator



- After huge fluctuations, the average number of incoming missed calls per operator was in the range of 2.5 to 7.
- 3 incoming missed calls per day may be an achievable threshold for operators.

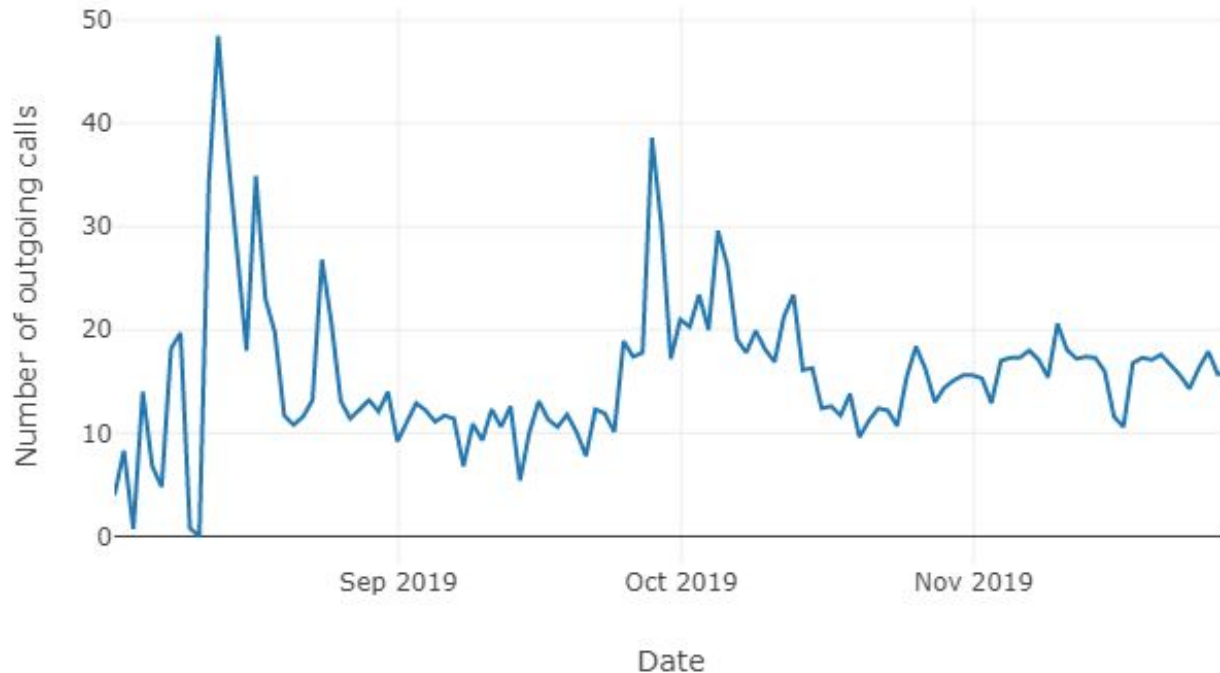
Dynamic of average waiting time for incoming calls

- It can be seen from the graph that in the last 2 months, operators generally answer incoming calls within 20 seconds or even less.



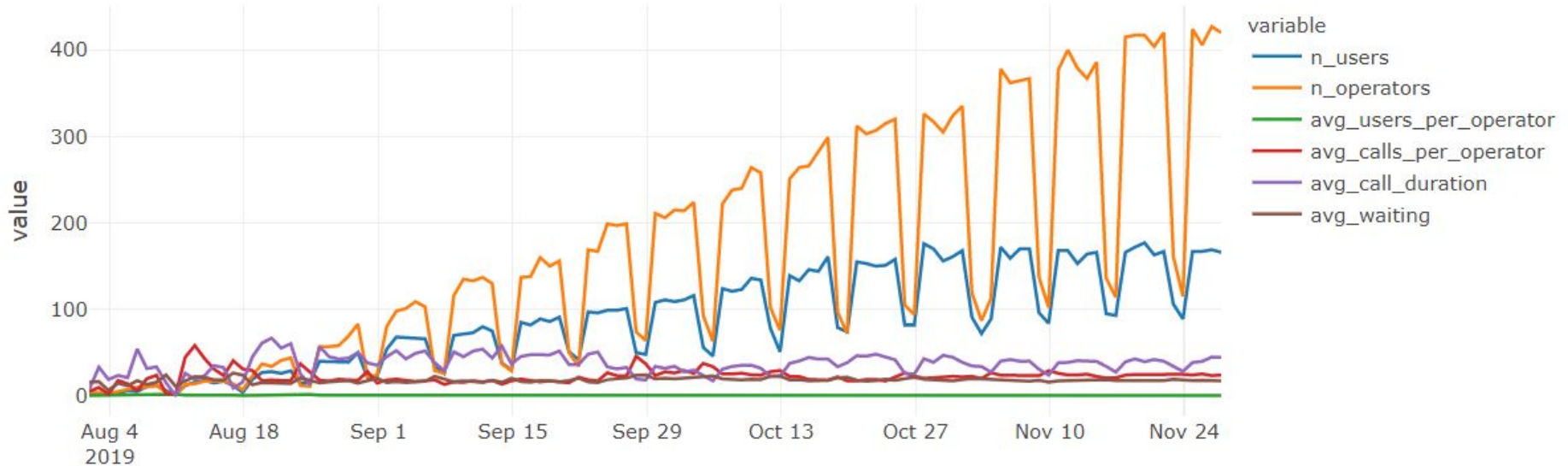
The average daily outgoing external calls per operator

- The daily minimum of outgoing calls that an operator should make, 20 calls, is an achievable threshold.



Average daily workload per operator

- The average daily workload of one operator has stabilized since mid-October.
- Average call rates over the past month have not changed significantly.



The period with more stable data that can be trusted

- This study will form the basis for the development of a new function.
- That's why it was proposed to use a subset of the data **from October 13 to November 27** as a period with stable data that can be trusted.



The criteria that determine the operator's efficiency:

Missed Incoming calls



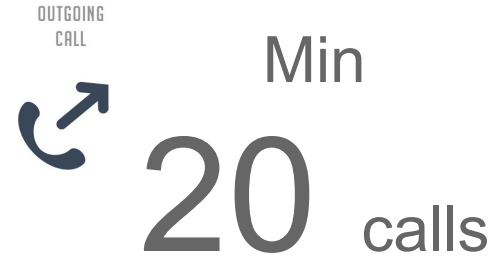
The maximum number of missed incoming calls during a working day is 3 calls.

Waiting Time



The maximum allowable waiting time is 20 seconds.

Outgoing calls



Daily minimum of outgoing external calls to be made by the operator: 20 calls.

How the operator's daily efficiency is calculated:

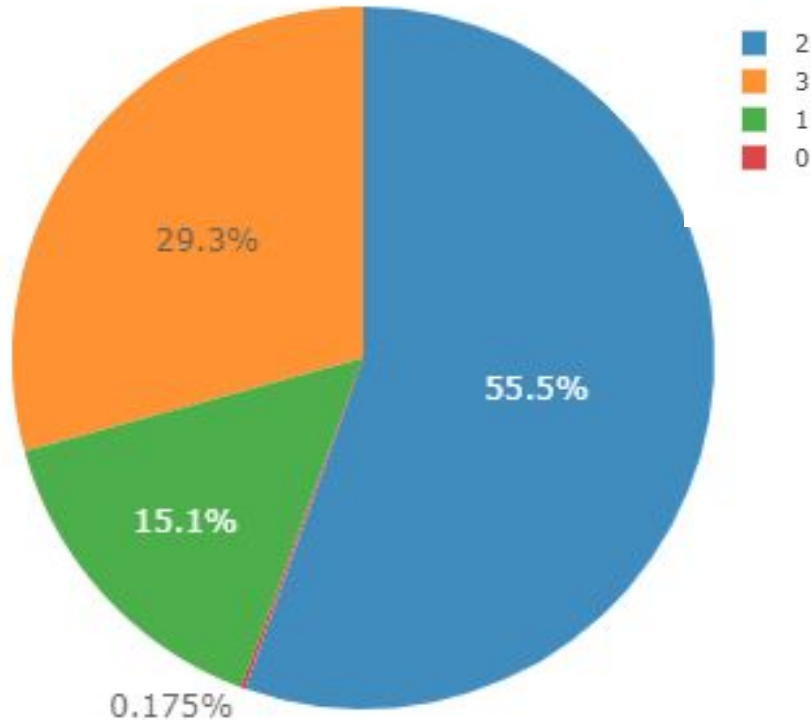
- The operator is assessed if his/her daily productivity meets the working standards
- The operator can receive on a working day:

Maximum score - 3 points :)

Minimum score - 0 points :(

	indicators	standards	success	fail
0	max_missed_calls	3	1	0
1	max_waiting_time	20	1	0
2	min_out_calls	20	1	0

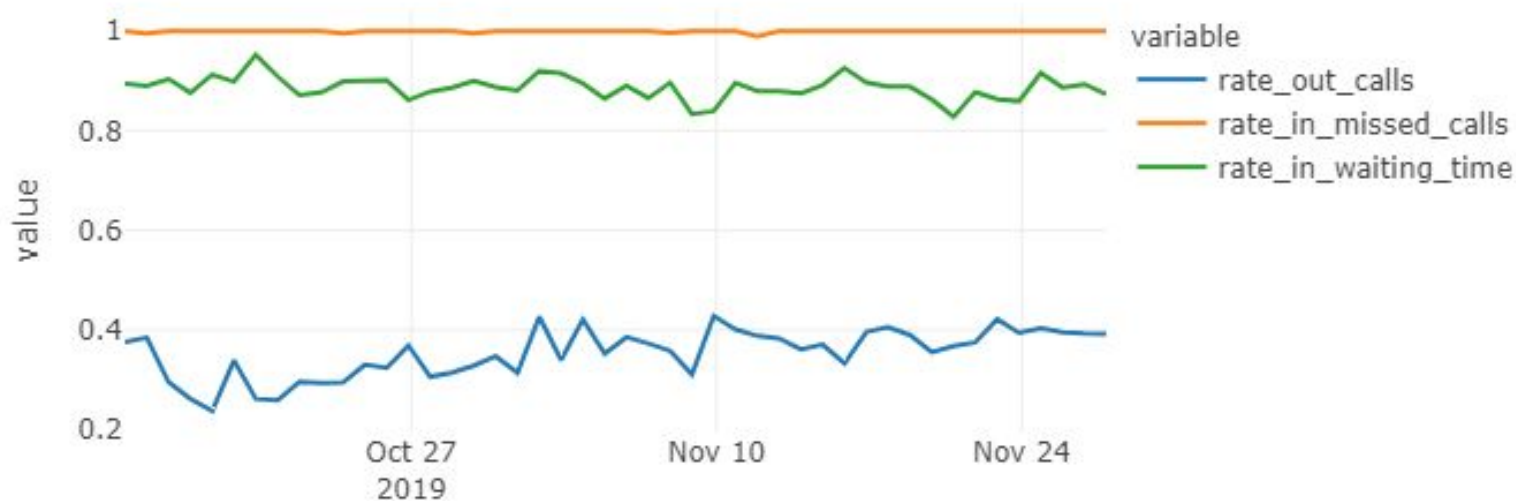
Overview of total daily efficiency From October 13 to November 27



- It is pleasant to note that about **30%** of operators have the highest efficiency
 - Only **0.2%** have the lowest efficiency.
-
- Maximum score - 3 points :)
 - Minimum score - 0 points :(

Overview of total efficiency by performance indicators

- Making **outgoing calls** has the lowest average daily efficiency rating, on the level below 0.5:
- Only 5 operators lost more than 3 incoming calls per working day.



Efficient vs Ineffective operators



693

- To be objective, an operator is presumed to be ineffective if his / her ***overall average score was 1 or less.***
- ***From October 13 to November 27, 16 operators worked ineffectively.***



16

Recommendations:



Missed Incoming calls

MISSED
CALL



Max
0 calls

Reduce the number of missed incoming calls to **zero**



Waiting Time

INCOMING
CALL



Max
15 sec

Reduce the waiting time for incoming calls, for example, to **15 seconds**



Outgoing calls

OUTGOING
CALL



Min
20 calls

It depends on tariff plan.
More research required